

**AMENDMENTS TO THE SPECIFICATION:**

Please add the following at page 1, before line 1 and after the title:

**BACKGROUND**

1. Field of the Invention

Please add the following at page 1, between lines 1 and 2:

2. Related Art

Please add the following at page 1, between lines 24 and 25:

**BRIEF SUMMARY**

Please amend the paragraph on page 1, beginning at line 26 as follows:

According to an exemplary embodiment of the present invention, there is provided a method of administering resource utilization in a computer, the method comprising the steps of: running a first process to make a reservation for access to a resource in dependence on a resource requirement communication from an application process; running a second process to grant requests for access to said resource from said application process in dependence on said reservation; creating a scheduling means having a method or methods for processing reservation requests for a plurality of resources and initiating resource specific reservation processing; creating a reservation means having a method or methods for making reservations for access to a resource; said application process calling a method of the scheduling means, said method taking a first resource access requirement definition as a parameter; said method of the scheduling means calling a reservation method of the reservation means to make a reservation for said

application process, the reservation method taking a second resource access requirement definition as a parameter; running a resource specific scheduling process to grant access to a resource in dependence on the reservation made by the reservation means; and utilizing said resource of the purposes of said application process. The reservation request may be made by an application *per se* or a sub-process or component thereof. furthermore, access may be granted to any process of an application or for a particular sub-unit of the application for which the reservation request was made.

Please amend the paragraph on page 2, beginning at line 23 as follows:

A method according to an exemplary embodiment of the present invention can be applied to the allocation of CPU time, access to mass storage devices, e.g., hard disk drives, optical disk drives and the like, and memory management.

Please amend the paragraph at page 3, beginning at line 9 as follows:

According to an exemplary embodiment of the present invention, there is also provided a method of scheduling access to a CPU which may be implemented in a method of administering resource utilization in a computer according to the present invention, the method comprising the steps of: generating a one-dimensional reservation request pattern; merging the reservation request pattern with a one-dimensional CPU access control pattern, representing empty CPU access time slots and reserved CPU access time slots, without substantially disturbing either the reservation request pattern or the reserved CPU access time slots in the reservation request pattern.

Please amend the paragraph at page 3, beginning at line 27 as follows:

According to an exemplary embodiment of the present invention, there is provided a method of granting access to a CPU which may be implemented in a method of administering resource utilization in a computer according to the present invention, the method comprising:

generating a one-dimensional CPU access control pattern, each element of which relates to a quantum of CPU access time; and at the end of a quantum of CPU access time;

generating access to any pending processes having a priority greater than a predetermined level; and then if the next pattern element is empty then granting access to a pending process meeting a predetermined prioritisation (e.g., Round-Robin) criterion else granting access to a process identified in the pattern element.

Please add the following at page 4, between lines 11 and 12:

**BRIEF DESCRIPTION OF THE DRAWINGS**

Please add the following at page 4, between lines 22 and 23:

**DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS**

Please replace the paragraph at page 12, beginning at line 23:

Referring to Figures 2, 4 and 45, the CPU secondary scheduler 16 repeatedly performs the following process. The CPU secondary scheduler 16 determines whether a new thread is pending in the dispatcher 11 (step s101). If a new thread is pending, the CPU secondary scheduler 16 determines whether a thread is currently running (step s102). If a thread is currently running, it determines whether the new pending thread has a higher priority than the running thread (in this context a guaranteed service thread has "priority" over a best-effort service thread with the same priority) (step s103). If the new thread's priority is higher, the CPU

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secondary scheduler 16 pre-empts the running thread, dispatches the new thread and places the pre-empted thread at the head of its priority level queue in the dispatcher 11 (step s104).

Page 14, before line 1, amend the title as follows:

CLAIMSWHAT IS CLAIMED IS: